#### **CHAPTER 4**

# LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

#### User note:

About this chapter: Chapter 4 sets forth requirements to establish the minimum environment for occupiable and habitable buildings by establishing the minimum criteria for light and ventilation and identifying occupancy limitations including minimum room width and area, minimum ceiling height and restrictions to prevent overcrowding.

### SECTION 401 GENERAL

**401.1 Scope.** The provisions of this chapter shall govern the minimum conditions and standards for light, *ventilation* and space for occupying a structure.

**401.2 Responsibility.** The *owner* of the structure shall provide and maintain light, *ventilation* and space conditions in compliance with these requirements. A person shall not occupy as *owner-occupant*, or permit another person to occupy, any *premises* that do not comply with the requirements of this chapter.

**401.3 Alternative devices.** In lieu of the means for natural light and *ventilation* herein prescribed, artificial light or mechanical *ventilation* complying with the *International Building Code* shall be permitted.

## SECTION 402 LIGHT

402.1 Habitable spaces. Every habitable space shall have not less than one window of approved size facing directly to the outdoors or to a court. The minimum total glazed area for every habitable space shall be 8 percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than 3 feet (914 mm) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room.

Exception: Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be not less than 8 percent of the floor area of the interior room or space, or not less than 25 square feet (2.33 m<sup>2</sup>), whichever is greater. The exterior glazing area shall be based on the total floor area being served.

402.2 Common halls and stairways. Every common hall and stairway in residential occupancies, other than in one-and two-family dwellings, shall be lighted at all times with not less than a 60-watt standard incandescent light bulb for each 200 square feet (19 m²) of floor area or equivalent illumination, provided that the spacing between lights shall not be greater than 30 feet (9144 mm). In other than residential occupancies, interior and exterior means of egress, stairways

shall be illuminated at all times the building space served by the means of egress is occupied with not less than 1 footcandle (11 lux) at floors, landings and treads.

**402.3** Other spaces. Other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe *occupancy* of the space and utilization of the appliances, equipment and fixtures.

#### SECTION 403 VENTILATION

**403.1 Habitable spaces.** Every *habitable space* shall have not less than one openable window. The total openable area of the window in every room shall be equal to not less than 45 percent of the minimum glazed area required in Section 402.1.

Exception: Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be not less than 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m²). The ventilation openings to the outdoors shall be based on a total floor area being ventilated.

403.2 Bathrooms and toilet rooms. Every bathroom and toilet room shall comply with the ventilation requirements for habitable spaces as required by Section 403.1, except that a window shall not be required in such spaces equipped with a mechanical ventilation system. Air exhausted by a mechanical ventilation system from a bathroom or toilet room shall discharge to the outdoors and shall not be recirculated.

**403.3 Cooking facilities.** Unless approved through the certificate of occupancy, cooking shall not be permitted in any rooming unit or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the rooming unit or dormitory unit.

#### **Exceptions:**

- Where specifically approved in writing by the code official.
- 2. Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

**403.4 Process ventilation.** Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust *ventilation* system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

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**403.5** Clothes dryer exhaust. Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted outside the structure in accordance with the manufacturer's instructions.

**Exception:** Listed and *labeled* condensing (ductless) clothes dryers.

# SECTION 404 OCCUPANCY LIMITATIONS

- **404.1 Privacy.** Dwelling units, hotel units, housekeeping units, rooming units and dormitory units shall be arranged to provide privacy and be separate from other adjoining spaces.
- 404.2 Minimum room widths. A habitable room, other than a kitchen, shall be not less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a minimum clear passageway of 3 feet (914 mm) between counterfronts and appliances or counterfronts and walls.
- **404.3 Minimum ceiling heights.** Habitable spaces, hallways, corridors, laundry areas, bathrooms, toilet rooms and habitable basement areas shall have a minimum clear ceiling height of 7 feet (2134 mm).

#### **Exceptions:**

- 1. In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center and projecting not greater than 6 inches (152 mm) below the required ceiling height.
- Basement rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a minimum ceiling height of 6 feet 8 inches (2033 mm) with a minimum clear height of 6 feet 4 inches (1932 mm) under beams, girders, ducts and similar obstructions.
- 3. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a minimum clear ceiling height of 7 feet (2134 mm) over not less than one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a minimum clear ceiling height of 5 feet (1524 mm) shall be included.
- **404.4 Bedroom and living room requirements.** Every *bedroom* and living room shall comply with the requirements of Sections 404.4.1 through 404.4.5.
  - 404.4.1 Room area. Every living room shall contain not less than 120 square feet (11.2 m<sup>2</sup>) and every bedroom shall contain not less than 70 square feet (6.5 m<sup>2</sup>) and every bedroom occupied by more than one person shall contain not less than 50 square feet (4.6 m<sup>2</sup>) of floor area for each occupant thereof.
  - **404.4.2** Access from bedrooms. Bedrooms shall not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces.

Exception: Units that contain fewer than two bed-rooms.

- 404.4.3 Water closet accessibility. Every bedroom shall have access to not less than one water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to not less than one water closet and lavatory located in the same story as the bedroom or an adjacent story.
- **404.4.4 Prohibited occupancy.** Kitchens and nonhabitable spaces shall not be used for sleeping purposes.
- 404.4.5 Other requirements. Bedrooms shall comply with the applicable provisions of this code including, but not limited to, the light, ventilation, room area, ceiling height and room width requirements of this chapter; the plumbing facilities and water-heating facilities requirements of Chapter 5; the heating facilities and electrical receptacle requirements of Chapter 6; and the smoke detector and emergency escape requirements of Chapter 7.
- **404.5 Overcrowding.** Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

TABLE 404.5
MINIMUM AREA REQUIREMENTS

	MINIMUM AREA IN SQUARE FEET		
SPACE	1-2 occupants	3-5 occupants	6 or more occupants
Living rooma, b	120	120	150
Dining room <sup>a, b</sup>	No requirement	80	100
Bedrooms	Shall comply with Section 404.4.1		

For SI: 1 square foot =  $0.0929 \text{ m}^2$ .

- a. See Section 404.5.2 for combined living room/dining room spaces.
- See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.
  - 404.5.1 Sleeping area. The minimum occupancy area required by Table 404.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. Sleeping areas shall comply with Section 404.4.
  - **404.5.2 Combined spaces.** Combined living room and dining room spaces shall comply with the requirements of Table 404.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.
- **404.6 Efficiency unit.** Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:
  - 1. A unit occupied by not more than one occupant shall have a minimum clear floor area of 120 square feet (11.2 m²). A unit occupied by not more than two *occupants* shall have a minimum clear floor area of 220 square feet (20.4 m²). A unit occupied by three *occupants* shall have a minimum clear floor area of 320 square feet (29.7 m²). These required areas shall be exclusive of the areas required by Items 2 and 3.
  - 2. The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a minimum clear working space of 30 inches (762 mm)

- in front. Light and ventilation conforming to this code shall be provided.
- 3. The unit shall be provided with a separate *bathroom* containing a water closet, lavatory and bathtub or shower.
- 4. The maximum number of occupants shall be three.

**404.7** Food preparation. Spaces to be occupied for food preparation purposes shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner. There shall be adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage.